

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Vapor Filter

PART NUMBER: 230120

GENERAL USE: Filter for organic vapors

PRODUCT DESCRIPTION: Carbon filter

Thermo
ELECTRON CORPORATION

MANUFACTURER'S NAME

Thermo Electron Corporation

DATE PREPARED: September 14, 2003

SUPERSEDES: May 1, 2002

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ADDRESS (NUMBER, STREET, P.O. BOX)

171 Industry Drive

TELEPHONE NUMBER FOR INFORMATION

(412) 788-1133

(CITY, STATE AND ZIP CODE)

Pittsburgh, PA 15275

COUNTRY

USA

EMERGENCY TELEPHONE NUMBER

CHEM • TEL (800) 255-3924 Outside USA (813) 248-0585

DISTRIBUTOR'S NAME

Thermo Electron Corporation

ADDRESS (NUMBER, STREET, P.O. BOX)

93/96 Chadwick Road, Astmoor

TELEPHONE NUMBER FOR INFORMATION

+44 (0) 1928 562547

(CITY, STATE AND ZIP CODE)

Runcorn, Cheshire WA7 1PR

COUNTRY

United Kingdom

EMERGENCY TELEPHONE NUMBER

CHEM • TEL (800) 255-3924 Outside USA (813) 248-0585

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	% (by weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES Full Text Section 16
Carbon	not specified	7440-44-0	231-153-3	F, Xi	R-11, 36/37

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Contact with the contents of the filter apparatus is not likely under normal usage conditions, however direct contact with carbon may cause skin and eye irritation. May cause respiratory irritation if inhaled. Risk phrases - None Hazard symbol - None

POTENTIAL HEALTH EFFECTS

INHALATION: Inhalation of airborne dust particles is harmful and irritating to respiratory tract.

SKIN: Contact with skin may cause irritation.

EYES: Contact with eyes may cause irritation.

INGESTION: May cause gastric distress, stomach pains, vomiting and diarrhea.

CARCINOGENICITY

NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

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SECTION 4 - FIRST AID MEASURES

INHALATION: Remove affected person to fresh air; wash mouth and nasal passages with water repeatedly; if breathing difficulties persist seek medical attention.

SKIN: Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.

EYES: Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.

INGESTION: Give two glasses of water for dilution; DO NOT induce vomiting; never give anything by mouth to an unconscious person; seek medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

GENERAL HAZARDS: Products of combustion include carbon oxides and graphite dust.

EXTINGUISHING MEDIA

Carbon dioxide, dry chemical. Water may be ineffective. Use water or water fog on dust fires.

FIRE FIGHTING PROCEDURES

Firefighters must wear full facepiece self - contained breathing apparatus in positive pressure mode. Dusts are combustible.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Store in original containers.

HAZARDOUS COMBUSTION PRODUCTS

Smoke, fumes, oxides of carbon

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Small spills - wash to sanitary sewer with plenty of water. Large spills - Recover and segregate product for reuse; shovel product into approved container for disposal.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use; protect containers from abuse; store containers in cool, dry area. Keep this and other chemicals out of reach of children.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH				ACGIH			
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3
Carbon	--	5	--	--	--	10	--	--

PERSONAL PROTECTION:

RESPIRATORY PROTECTION (SPECIFY TYPE): NIOSH approved respirator designed to remove airborne particulate present in excess of maximum allowable concentrations due to secondary operations. Refer to 29 CFR 1910.134 or European Standard EN 149 for regulations.

PROTECTIVE GLOVES: Neoprene or rubber gloves.

EYE PROTECTION: Protective eyeglasses or chemical safety goggles. Refer to 29 CFR 1910.133 or European Standard EN166.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety eyebath nearby

WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR Filter apparatus containing carbon, no odor	VAPOR PRESSURE Not applicable
pH Not applicable	SPECIFIC GRAVITY (WATER = 1) Not specified
BOILING POINT / BOILING RANGE Not applicable	SOLUBILITY IN WATER Negligible
FLASH POINT Not applicable	VISCOSITY Not applicable
FLAMMABLE LIMITS LEL: Not applicable UEL: Not applicable	VAPOR DENSITY (AIR = 1) Not applicable
AUTOIGNITION TEMPERATURE Not determined	EVAPORATION RATE (WATER = 1) Not applicable

SECTION 10 - STABILITY AND REACTIVITY

STABILITY UNSTABLE: STABLE: XXX	CONDITIONS TO AVOID: Avoid generating airborne dust
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong acids	
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes, and smoke may be produced.	
HAZARDOUS POLYMERIZATION MAY OCCUR: WILL NOT OCCUR: XXX	CONDITIONS TO AVOID: None

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Carbon	7440-44-0 231-153-3	> 10 g / kg Oral - rat	> 64.4 mg / l Inhalation - rat

SECTION 12 - ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: According to the European Waste Catalogue, waste codes are application specific and should be assigned by the user based on the application for which the product is used. Dispose of in accordance with Local, State, and Federal Regulations. Product is classified as non-hazardous, however, non-hazardous materials may become hazardous waste upon contact with other products. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals.

SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Not Regulated DOT HAZARD CLASS / Pack Group: Not regulated REFERENCE: Not Applicable UN / NA IDENTIFICATION NUMBER: None LABEL: None Required HAZARD SYMBOLS: None	IATA HAZARD CLASS / Pack Group: Not regulated IMDG HAZARD CLASS: Not regulated RID/ADR Dangerous Goods Code: Not regulated UN TDG Class / Pack Group: Not regulated
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Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

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SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (USA - Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories
None

313 Reportable Ingredients:
None

CERCLA (USA - Comprehensive Response Compensation and Liability Act)

None

CPR (Canadian Controlled Products Regulations)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

IDL (Canadian Ingredient Disclosure List)

Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)

Components of this product identified by CAS number are listed on the DSL or NDSL and may or may not be listed in Section 2 of this document. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.

EINECS (European Inventory of Existing Commercial Chemical Substances)

Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

WGK Water Quality Index: nwg

RISK PHRASES:
Not classified

SYMBOL(S) REQUIRED FOR LABEL

None

SAFETY PHRASES:
Not classified

SECTION 16 - OTHER INFORMATION

Notes & full R-Phrase text

R11 Highly flammable.
R36/37 Irritating to eyes and respiratory system

HMIS HAZARD RATINGS

HEALTH	0	0 = INSIGNIFICANT	3 = HIGH
FLAMMABILITY	1	1 = SLIGHT	4 = EXTREME
REACTIVITY	0	2 = MODERATE	
PERSONAL PROTECTIVE EQUIPMENT	E	Safety Glasses, Gloves, Dust Respirator	

REVISION SUMMARY:

This MSDS has been revised in the following sections: No revisions available

MSDS Prepared by: Chem-Tel, Inc.
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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.